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FAX FILING IN U.S. PATENT & TRADEMARK OFFICEDATE: March 24, 2006

TIME: _____

TO:	Refund Branch	FAX NO.:	571-273-6500
FROM:	Christopher R. Lewis	ADMIN. ASST.:	Lisa Bennett
APPLN. NO.:	10/530,166	ATTY. DOCKET NO.:	JMYT-349US
TITLE OF APPLN.: EXHAUST SYSTEM FOR A DIESEL ENGINE COMPRISING A NOx-TRAP			
FILING DATE:	October 11, 2005	ART UNIT:	3747
FIRST INVENTOR:	Martyn Vincent Twigg	CONF. NO.:	5620
TITLE OF DOCUMENT (and List of Attachments): Transmittal Form; Request for Refund;			
Copy of February 2006 Deposit Account Statement; and Copy of Amendment filed April 4, 2005			

Total Number of Pages: 14 (Including this form)**COMMENTS****CONFIDENTIAL AND PRIVILEGED ATTORNEY/CLIENT INFORMATION**

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PTO/SB/21 (09-04) (AW 10/2004)

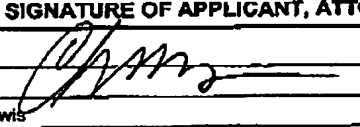
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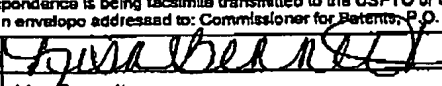
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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/530,188
	Filing Date	October 11, 2005
	First Named Inventor	Martyn Vincent Twigg
	Art Unit	3747
	Examiner Name	
Total Number of Pages in This Submission 13	Attorney Docket No.	JMYT-349US

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/Declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.62 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input checked="" type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Copy of February 2006 Deposit Account Statement Copy of Amendment filed April 4, 2005 Return Receipt Postcard
Remarks:		

SIGNATURE OF APPLICANT, ATTORNEY OR AGENT			
Firm Name	RatnerPrestita		
Signature			
Printed Name	Christopher R. Lewis		
Date	March 24, 2006	Registration No.	36,201

CERTIFICATE OF TRANSMISSION / MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Signature			
Typed or Printed Name	Lisa Bennett	Date	March 24, 2006

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to be (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, ALEXANDRIA, VA 22313-1450.

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T-588 P.003/014 F-848

JMYT-349US

2006 MAR 24 PM 3:52

U.S. PATENT & TRADEMARK
OFFICE
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

☒ In re Appln. No: 10/530,166
Applicant: Martyn Vincent Twigg
Filed: October 11, 2005
Title: EXHAUST SYSTEM FOR A DIESEL ENGINE COMPRISING A NO_x-TRAP
TC/A.U.: 3747
Examiner:
Docket No.: JMYT-349US

OR

☐
Patent No:
Issued:

REQUEST FOR REFUND
(Improper Charge of Deposit Account)

Mail Stop 16
Director of the U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I. REFUND REQUEST

This is a request for refund with respect to the charge to Deposit Account No. 18-0350 shown on the statement dated February 2006 for the above-identified ☒ application/☐ patent.

☒ Accompanying this request is a copy of the monthly statement on which the referred error is listed.

Page 1 of 3

Adjustment date: 12/19/2006 PBOOKER
02/27/2006 PBOOKER 00000001 180350 10530166
01 FC:1615 450.00 CR

JMYT-349US

II. FEES CHARGED FOR WHICH REFUND IS REQUESTED

		Amount of Refund Requested	
<input type="checkbox"/>	Filing Fee	\$	0
<input type="checkbox"/>	Surcharge for filing the basic filing fee on a date later than the filing date of the application (37 CFR 1.16(e))	\$	0
AND/OR			
<input type="checkbox"/>	Surcharge for filing the oath or declaration on a date later than the filing date of the application (37 CFR 1.16(e))	\$	0
<input type="checkbox"/>	Extension of time - months	\$	0
<input checked="" type="checkbox"/>	Excess claims	\$	450
<input type="checkbox"/>	Issue Fee	\$	0
<input type="checkbox"/>	Petition Fee	\$	0
<input type="checkbox"/>	Patent Maintenance Fee - year	\$	0
<input type="checkbox"/>	Patent Maintenance Fee Surcharge	\$	0
<input type="checkbox"/>	Other (please explain)	\$	0
TOTAL REFUND REQUESTED		\$	450

III. EXPLANATION OF WHY CONTESTED CHARGE IS IN ERROR

The fee of \$450 (for nine (9) claims in excess of twenty (20)) was charged to Deposit Account No. 18-0350 in February of 2006, for the above-identified application. A copy of the Deposit Account Statement is enclosed.

A Preliminary Amendment (copy enclosed) was filed in this application on April 4, 2005. As indicated in the Preliminary Amendment, this application contains a total of twenty (20) claims, three (3) of which are independent.

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As the total number of claims in this application does not exceed twenty (20), and there are only three (3) independent claims, no additional fees were due in this application. Accordingly, a refund of the charge of \$450 is respectfully requested.

IV. MANNER OF REFUND

Please make refund by:

- ☒ crediting Deposit Account No. 18-0350.
☐ refunding payment.

Respectfully submitted,


Christopher R. Lewis, Reg. No. 36,201
Attorney for Applicant

CRL/lrb

- ☒ Attachments: Copy of Deposit Account Statement of February 2006
Copy of Preliminary Amendment filed April 4, 2005

Dated: March 24, 2006

P.O. Box 980
Valley Forge, PA 19482-0980
(610) 407-0700

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that, on the date shown below, this correspondence is being facsimile transmitted to the Patent and Trademark Office at 571-273-6500.

Date: March 24, 2006
Lisa Bennett

URR_11JMYT349USVAREFUNDREQUEST.DOC



**United States
Patent and
Trademark Office**



Deposit Account Statement

Requested Statement Month: February 2006
 Deposit Account Number: 180350
 Name: RATNER AND PRESTIA
 Attention:
 Address: P O BOX 980
 City: VALLEY FORGE
 State: PA
 Zip: 19482
 Country: UNITED STATES OF AMERICA

DATE	SEQ	POSTING REF TXT	ATTORNEY DOCKET NBR	FEE CODE	AMT	BAL
02/01	3	11342064	AST-102US	2111	\$250.00	\$14,868.13
02/01	4	11342064	AST-102US	2311	\$100.00	\$14,768.13
02/02	1	10255496	MTS-3360 US	1202	\$50.00	\$14,718.13
02/02	2	10255496	MTS-3360 US	1251	\$120.00	\$14,598.13
02/03	1	10660054	MAT-8260US1	1251	\$120.00	\$14,478.13
02/03	185	8517868	SCO-101AU1	8013	\$25.00	\$14,453.13
02/03	166	6936275	SCO-101AU1	8013	\$25.00	\$14,428.13
02/06	1	09662432	MTS-3205US	1464	\$130.00	\$14,298.13
02/06	2	09662432	MTS-3205US	1801	\$790.00	\$13,508.13
02/06	3	10840522	AGA-104US	2201	\$43.00	\$13,465.13
02/09	32	10116373	BSI-497US	1201	\$400.00	\$13,065.13
02/14	626	60637853	K&C-171USP	8007	\$20.00	\$13,045.13
02/16	269	10419312	021630-000420	8001	\$15.00	\$13,030.13
02/21	1	10087579	QDI-105US3	1814	\$130.00	\$12,900.13
02/21	362	11086890	MKPA-115US	8007	\$20.00	\$12,880.13
02/21	384	11079127	MKPA-110US	8007	\$20.00	\$12,860.13
02/22	1	10541731	DTG1-125US	1615	\$500.00	\$12,360.13
02/22	107	11099072	TCO1-115US	8007	\$120.00	\$12,240.13
02/23	23	10087579	QDI-105US3	1814	\$130.00	\$12,110.13
02/27	1	10530186	JMYT-349US	1615	\$450.00	\$11,660.13

START	SUM OF	SUM OF	END
BALANCE	CHARGES	REPLENISH	BALANCE
\$15,118.13	\$3,458.00	\$0.00	\$11,660.13

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JMYT-349US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No: To Be Assigned
Applicant: Martyn Vincent Twigg
Filed: Herewith
Title: EXHAUST SYSTEM FOR A DIESEL ENGINE COMPRISING A NO_x TRAP
TC/A.U.:
Examiner:
Confirmation No.:
Docket No.: JMYT-349US

PRELIMINARY AMENDMENT

Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Prior to examination, please amend the above-identified application as follows:

- ☒ Amendments to the Specification begin on page 2 of this paper.
- ☒ Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.
- ☐ Amendments to the Drawings begin on page _____ of this paper and include an attached replacement sheet(s).
- ☒ Amendments to the Abstract begin on page 6 of this paper. A revised Abstract is on page 7 of this paper.
- ☒ Remarks/Arguments begin on page 8 of this paper.

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Amendments to the Specification:

Please add the following new paragraph at page 1, after the title of the application:

This application is the U.S. national phase application of PCT International Application No. PCT/GB2003/004290, filed October 1, 2003, and claims priority of British Patent Application No. 0223126.4, filed October 5, 2002, and British Patent Application No. 0306264.3, filed March 19, 2003.

Please add the following heading at page 1, line 4:

FIELD OF THE INVENTION

Please add the following heading at page 1, line 8:

BACKGROUND OF THE INVENTION

Please add the following heading at page 4, line 8:

DETAILED DESCRIPTION OF THE INVENTION

Please add the following heading at page 7, line 7:

BRIEF DESCRIPTION OF THE DRAWINGS

Please add the following heading at page 8, line 13:

EXAMPLES

JMYT-349US

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) An exhaust system for a diesel engine, which system ~~comprising~~ comprises a NO_x-trap comprising at least one first NO_x absorbent and platinum, ~~characterised in that; and~~

at least one second NO_x absorbent consisting essentially of ~~at least one of alumina and/or and ceria~~ is disposed upstream of the first NO_x-trap
2. (Original) An exhaust system according to claim 1, wherein the first NO_x-absorbent is selected from the group consisting of alkaline earth metal compounds, alkali metal compounds, rare earth metal compounds and mixtures of any two or more thereof.
3. (Currently Amended) An exhaust system according to claim 2, wherein the or each alkaline earth metal ~~compounds~~ is selected from the group consisting of barium, magnesium, strontium and calcium.
4. (Currently Amended) An exhaust system according to claim 2, wherein the or each alkali metal ~~compounds~~ is selected from the group consisting of potassium and caesium.
5. (Currently Amended) An exhaust system according to claim 2, wherein the or each rare earth metal ~~compounds~~ is selected from the group consisting of cerium, yttrium, lanthanum and praseodymium.
6. (Currently Amended) An exhaust system according to claim 2, 3, 4 or 5, wherein the or each alkaline earth metal ~~compound compounds~~, the or each alkali metal ~~compound compounds~~ or the or each rare earth metal ~~compound compounds~~ is supported on a support material.
7. (Currently Amended) An exhaust system according to claim 6, wherein the or each support is selected from the group consisting of alumina, silica, titania, zirconia, ceria and mixtures or a composite oxide of any two or more thereof.
8. (Currently Amended) An exhaust system according to claim ~~6, 2~~, wherein the first NO_x absorbent ~~comprises the support~~ is a support for the platinum.

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9. (Currently Amended) An exhaust system according to ~~any preceding claim, 1~~ further comprising a catalyst for oxidising NO to NO₂ disposed between the at least one second NO_x absorbent and the NO_x-trap.
10. (Original) An exhaust system according to claim 9, wherein the NO oxidation catalyst is platinum on an alumina support.
11. (Currently Amended) An exhaust system according to claim 9 ~~or 10~~, further comprising a particulate filter disposed between the oxidation catalyst and the NO_x-trap.
12. An exhaust system according to ~~any of claims 1 to 10~~ claim 1, wherein the NO_x-trap further comprises a particulate filter.
13. An exhaust system according to ~~any preceding claim, 1~~ further comprising a catalyst comprising a catalyst component for oxidising hydrocarbon and carbon monoxide to water and carbon dioxide and an oxygen storage component, ~~which wherein the catalyst is disposed downstream of the NO_x-trap.~~
14. (Original) An exhaust system according to claim 13, wherein the oxidation catalyst comprises platinum or palladium supported on a bulk ceria-zirconia mixed oxide oxygenation storage component.
15. (Currently Amended) A diesel engine comprising an exhaust system according to ~~any preceding claim, 1~~.
16. (Original) A light-duty diesel engine according to claim 15.
17. (Currently Amended) An engine according to claim 15 ~~or 16~~, comprising an engine control unit, when in use, intermittently to adjust the exhaust gas composition to the rich side for regenerating the at least one first NO_x absorbent.
18. (Currently Amended) A flow-through substrate comprising: a NO_x-trap comprising a first zone coated with a composition comprising at least one first NO_x absorbent and platinum, and a second zone coated with a composition comprising at least one second NO_x-absorbent, which at least one second NO_x absorbent ~~consisting~~ consists essentially of alumina and/or ceria.

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19. (Currently Amended) A method of treating NO_x in the exhaust gas of a diesel engine, which method comprising:
- (i) absorbing NO_x from lean exhaust gas in at least one second NO_x absorbent consisting essentially of alumina and/or ceria, when a downstream NO_x trap comprising at least one first NO_x absorbent and platinum is ~~inactive for reducing NO_x using a suitable reductant;~~
 - (ii) thermally desorbing ~~stored~~ NO_x from the at least one second NO_x absorbent; and
 - (iii) reducing NO_x on the downstream NO_x trap using a suitable reductant.
20. (Currently Amended) A method according to claim 19, further comprising the step between steps (i) and (ii) of adsorbing NO_x on the at least one first ~~second~~ NO_x absorbent of the downstream NO_x trap.

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Amendment to the Abstract:

The Abstract has been amended. A revised Abstract is attached.

Attachment

COPY

JMYT-349US

ABSTRACT

An exhaust system (10) for a diesel engine (12) comprises includes a first NO_x trap (16) comprising having at least one first NO_x absorbent and platinum, characterised in that The exhaust system also has at least one second NO_x absorbent (14) is disposed upstream of the first NO_x trap, which The at least one second NO_x absorbent is not associated with platinum is alumina, ceria, or both.

COPY

JMYT-349US

Remarks/Arguments:

Claims 1-20 are the pending claims in this application.

Respectfully submitted,



Christopher R. Lewis, Reg. No. 36,201
Christian M. Bauer, Reg. No. 51,441
Attorneys for Applicant

CMB/lrb

Dated: April 4, 2005

P.O. Box 980
Valley Forge, PA 19482-0980
(610) 407-0700

The Commissioner for Patents is hereby
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April 4, 2005

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Kathleen Libby

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